Claims

1. Universal joint hinge (10) for the articulation of a door leaf (12) on the carcass of a piece of furniture with a mounting plate (18) which is disposed on the supporting wall of the carcass and on which a carcass mounting part (16) constructed as an elongated support arm is connected to a universal joint mechanism and the door leaf mounting part (20) is constructed as a hinge cup, wherein the universal joint mechanism has two joint arms (22; 24) which in their central region are pivotable relative to one another like scissors and of which each one is pivotable at one of its ends about a fixed axis on one of the mounting parts (16; 20) and at the respective other end is attached to the respective other mounting part (20; 16) so as to be variable in position along a predetermined space curve extending in a plane lying at right angles to the pivot axis of the hinge, characterised in that the joint arm (24) which is mounted so as to be pivotable about a fixed axis on or in the door leaf mounting part (20) is mounted at its opposite end coupled to the carcass mounting part (16) so as to be pivotable about a fixed axis (bearing journal 34) on or in the end region of the carcass mounting part (16) inside the carcass, that the portion of this joint arm (24) which is positioned between the region which is pivotably mounted on the carcass mounting part (16) and the region which supports the joints arms (22; 24) so that they pivot approximately centrally like scissors comprises two joint arm portions (24a; 24b) which are longitudinally displaceable relative to one another by a predetermined amount, and that a damping device which is effective at least during a part of the displacement movement of the joint arm portions relative to one another is provided between the two joint arm portions (24a; 24b).

2. Universal joint hinge as claimed in Claim 1, characterised in that the joint arm portions (24a; 24b) which are displaceable relative to one another are advantageously constructed so that they interengage telescopically.

3. Universal joint hinge as claimed in Claim 2, characterised in that one joint arm portion (24b) is formed by an elongated cylinder which is disposed so as to be longitudinally displaceable on a piston rod which forms the other joint arm portion.

4. Universal joint hinge as claimed in Claim 3, characterised in that the piston rod (24a) is attached integrally on the central region pivotably coupled in scissor fashion to the other joint arm (22), and the cylinder (24b) which is disposed so as to be longitudinally displaceable on the piston rod (24a) is articulated with its end facing away from the inlet side of the piston rod (24a) so that it is pivotable on the carcass mounting part (16).

5. Universal joint hinge as claimed in Claim 4, characterised in that the end of the cylinder (24b) which is articulated on the carcass mounting part (16) is closed.

6. Universal joint hinge as claimed in any one of Claims 3 to 5, characterised in that a piston of which the diameter is substantially equal to the internal diameter of the cylinder (24b) is mounted on the free end of the piston rod (24b), and that the interior of the cylinder is divided into two working spaces which are separated from one another by the piston and vary in volume in opposite directions in the case of a relative displacement of the piston rod (24a) and the cylinder (24b), and in which a fluid damping medium is provided.

7. Universal joint hinge as claimed in Claim 3, characterised in that the cylinder (24b) is integrally attached on the central region pivotably coupled in scissor fashion to the other joint arm (22), and that the piston rod (24a) which is disposed so as to be longitudinally displaceable in the cylinder (24b) is pivotably articulated on the carcass mounting part (16) at the free end thereof lying opposite the inlet side into the cylinder (24b).

8. Universal joint hinge as claimed in any one of Claims 3 to 7, characterised in that the aligned longitudinal central axes of the cylinder (24b) and of the piston rod (24a) lie in the longitudinal central plane of the hinge (10) extending at right angles to the pivot axis of the hinge.

9. Universal joint hinge as claimed in Claim 3 or 4, characterised in that the aligned longitudinal central axes of the cylinder (24b) and of the piston (24a) are disposed in a plane offset laterally from and parallel to the longitudinal central plane of the hinge (10).

10. Universal joint hinge as claimed in Claim 9, characterised in that in a second plane offset parallel to the opposing side of the longitudinal central plane of the hinge the aligned longitudinal central axes of a second cylinder (24b) provided there and of a second piston rod (24a) are disposed.